## **Process Description for MC4111**

The PMN substance is imported into the US in 190 kg closed head steel drums. The PMN substance is further reacted with other monomers at one US tolling site, Alberdingk Boley Inc., to manufacture an aqueous polyurethane dispersion.

The PMN substance is a liquid at room temperature. The PMN substance is charged to the reaction vessel via drum pump and drum wand. The PMN substance is fully reacted with other monomers to form a polymer in a single reaction vessel.

There are 18 workers that have the potential to be exposed to the PMN substance during charging to the reaction vessel. These workers have potential exposure during the charging of the PMN substance to the reaction vessel. Workers charging the PMN substance wear chemical safety goggles, chemically impervious gloves, work clothing with long sleeves and long pants and safety shoes. There is good general building ventilation in the reaction vessel area, therefore, respiratory protection is not necessary.

The empty drums that contained the PMN substance are collected in a drum trailer to send to a drum recycler. The drum recycler, Industrial Container Services, triple rinses the drums and either recycles the drums or shreds damaged drums and recycles the metal from the shredded drums.

There are 5 workers that have the potential to be exposed to the PMN substance at the drum recycler. Workers at the drum recycler wear chemical safety goggles, chemically impervious gloves, work clothing with long sleeves and long pants and safety shoes. There is good general building ventilation in the work area, therefore, respiratory protection is not necessary.